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(54) Title: ANTIGEN UPTAKE RECEPTOR FOR CANDIDA ALBICANS ON DENDRITIC CELLS

(57) Abstract: Dendritic cells (DC) that express the type II C-type lectin DC-SIGN (CD209) are located in the submucosa of tissues, where they mediate HIV-1 entry. Interestingly, the pathogen *Candida albicans*, the major cause of hospital-acquired fungal infections, is found at similar sites. Here it is demonstrated that DC-SIGN is able to bind *Candida albicans* both in DC-SIGN transfected cell lines and in human monocyte derived DC. Moreover, in immature DC, DC-SIGN is able to internalize *Candida* in specific DC-SIGN enriched vesicles, distinct from those containing the mannose receptor (MR; CD206), which is another *Candida* receptor on DC. Together, these results demonstrate that *C. albicans* has two major receptors on human monocyte derived DC, these receptors being DC-SIGN and MR. Targeting of DC-SIGN offers novel opportunities to combat chronic forms of candidiasis.

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